A New Approach To HR Issues Redressal Through Web Based Approach (Including Softwares & AI For The Solution)

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Abstract: Technological developments have impacted almost every aspect of life over the past few decades and are still growing. One such technological development that is being utilized in numerous industries and has the potential to drastically alter the world is artificial intelligence (AI). Artificial Intelligence (AI) is software that has the ability to think effectively, much like a human. There are four types of artificial intelligence (AI), according to some research: systems that behave like people, think like people, and act like people. Bersin (2018) claims that AI is currently integrated into many commercial activities and found in most software applications. A particular company function is human resources (HR), whereby AI integration is occurring more rapidly with respect to various HR functions such as recruitment, orientation, and training, to mention a few. AI integration in HR will allow HR professionals to focus more on strategic duties and less on lower-value, repetitive chores, but it does not mean that AI will completely replace HR managers. As a result, the image of how AI might help streamline and reorganize HR operations for greater agility and efficiency is undoubtedly more complicated. This article, which focuses on qualitative research, aims to explain how AI has been integrated into various HR tasks and its effects on firms, employees, and HRs.

Presenting the opportunities and difficulties that electronic HRM faces is another goal of this research. The current study is conceptual in nature, and via the evaluation of research publications, we have identified the potential and obstacles that web-based HRM faces. One of the most recent developments in the business sector that is starting to gain traction is web-based HRM. Our research leads us to the conclusion that integrating technology into HRM has improved an entity's dependability and security while also making it much simpler to record and store data on human resources. A new phenomenon, web based HRM can take many different forms. At its most basic, it might be a straightforward web-based system for accessing information linked to human resources (HR). High-end web-based HRM is a fully integrated, enterprise-wide electronic system that links HRM-related information, information, remedies, the form of databases, resources, software, and transactions. In general, managers, HRM specialists, and employees can use this system at any time.

Keywords: AI, HRM, Talent Acquisition, web based HRM, Learning and Development, HR practices

Introduction

The most contested and anticipated technical development, artificial intelligence (AI), has taken over a number of tasks in domains of business, engineering, science, and human resources. Progress in artificial intelligence is a boon to the current generation. Machines, software, and other automated systems now carry out routine tasks that were previously completed by hand (North, 2016). Computational intelligence, human intelligence simulation, a machine with minds, and many more terms have been used to describe artificial intelligence. AI is "the science and engineering of making intelligent machines," according to McCarthy (1956) (quoted in McCarthy, 1959). Another name for it is the endeavour to give a computer a mind and the ability to reason (Haugeland, 1985).

 AI is integrated into a wide range of goods and services, such as robotic automation that makes it possible to carry out repetitive tasks that people regularly complete. According to Rouse, (2017) machine learning which enables computers to function without requirement for programming, the creation of robots, the analysis and interpretation of visual data, the processing of human language, and the most well-known ongoing experiment self-driving cars through use of deep learning, image recognition and computer vision.

Human resource initiatives have a big impact on how well employees learn and enhance their abilities. By turning concepts into actions, it gives an organization a competitive edge. Human resources are an organization's lifeblood, and their management is in charge of establishing the work environment and culture. The management of individuals inside an organization is the main focus of HRM, which also emphasizes systems and procedures. Planning, hiring the proper people, keeping and growing them, and handling their separation and leaving are all essentially the focus of HRM. Therefore, managing human resources in a way that demonstrates their necessity for the appropriate positions is the main problem facing any firm. Staffing, strategy, structure along with system support that facilitates efficient HRM are the four elements that underpin innovation. The usage of electronic HRM is a result of the rise and popularity of web-based commerce. The term "web-based HRM" is rather recent. Web-based HRM enhances client orientation and service while also improving administration and efficiency. Web-based HRM is a program that lowers costs. The internet's tremendous growth over the past decade has led to a rise in the acceptance and use of electronic HRM. IT developments have the potential to address a number of future HRM issues, including recruiting, retaining, and inspiring staff; satisfying the need for a more strategic HR role; and handling "human element" of technology change. The majority of previous research was carried out in the United States and other western nations. However, because to social, cultural, and economic disparities, the findings of these studies might not be generalizable to other regions of the world (Seyal, 2000), also relatively little research has been done in this area in the developing nations.

Problem Statement

The lack of creative HR practices in India's human resources is primarily the result of an uncooperative attitude and organizational resistance to change. For any firm, increasing the efficiency of HR procedures is a challenge in and of itself. AI & Web-based HRM are becoming more and more common resulting from introduction of electronic broadcasting systems and important role that internet facilities play. Primary focus of this research is to identify challenges associated with web-based HRM & AI implementation in the present corporate environment.

Objectives of Current Research

• To assess potential and difficulties of web-based HRM in enhancing effectiveness of HR procedures within businesses.

• To look into how important AI is to HRM procedures in the modern world.

• To examine the relevant literature

Literature Review

Artificial Intelligence

McCarthy (1956) was first to invent term of artificial intelligence (AI), which is a term that encompasses information processing, automation theory, and cybernetics (as referenced in McCarthy, 1959). These days, artificial intelligence is characterized variably. For example, it can solve cognitive difficulties (Marr, 2018) or be a system that can carry out a task like an intelligent individual (Copeland, 2018). Many organizations have integrated artificial intelligence (AI) into their daily operations as a result of the technology's significant advancements and innovations. It is widely utilized in a number of commercial domains, including healthcare, manufacturing, retail, sports, human resources, accounting, and finance. According to a Narrative Science poll, roughly 61% of businesses have already incorporated AI into the way they operate, compared to 38% in 2016 (as stated in Rayome, 2018). This suggests that organizations are favourably considering AI for their company operations. Some of the AI use cases that have been applied in various industries are described here, based on earlier papers and reports.

The healthcare sector, one of the most important, is actively implementing AI in a number of areas, which includes patient care: drug discovery, automated medication, pregnancy management, personalized medication and care, imaging in medicine and diagnosis, and other medical management (Alriza, 2018).

The finance sector, which is essential to all businesses, has adopted artificial intelligence (AI) in a number of areas, including expense reporting, robot advice, credit lending and grading, billing, and more (10+ AI Use cases in fintech).

Transit encompasses both freight and public transit, which are used by both the general public and businesses. Reliability and safety are key considerations when implementing AI in transportation. Nonetheless, numerous areas have experimented with AI-powered transportation automation, including self-driving cars, trucks, and buses (Bharadwaj, 2018).

Retail, especially online shopping, gathers a great deal of data about customer preferences, spending patterns, and preferred channels. Giving AI access to this data enables businesses to create personalized shopping experiences for large audiences according to their tastes. When it comes to online shopping, AI assists marketers by delivering relevant ads, customers by helping to create ads that suit their preferences, and accounting by automating the creation of invoices, billing, and payments.

Based on the reviews, it is clear that AI is being used in all corporate domains. One area where AI is being used more quickly is human resources. To close this gap, however, there aren't enough research-based studies on AI and HR. With a focus on the Indian context, the current study uses qualitative research to highlight the HR domains where AI has been applied. The papers also highlight the effects AI in HR is having on the company, employees, and HR professionals.

Adopting E-HRM is the best way to implement HR strategies and practices in a business (Suramardhini, 2012). An online tool for supporting and automating HR procedures is called web-based HRM. Strohmeier (2007). The purpose of the paper is to evaluate web-based HRM and draw conclusions about its inferences for futuristic methods. It is enough to acknowledge web-based HRM as a significant, long-lasting, and inventive advancement in HRM that leads to significant shifts and new phenomena.

Sinha (2014) The majority of web-based HRM solutions, including SSA, ISA, HRIA, are already used in Indian enterprises, according to the data analysis. It is clear from analysis that the use of the majority of web-based HRM tools, such as IVR, HRIA, SSA, HREA, HRPA, and ISA, varies greatly across public and private enterprises.

(Oswal, 2014) One high-tech approach to HRM tasks is web-based HRM. With the benefits of cost savings, effectiveness, adaptability, and employee involvement, web-based HRM can help businesses enhance their HR-related operations.

Deshwal (2015) The majority of businesses today strive for sustainable development in order to maintain their operations over the long run. Despite a number of drawbacks, web-based HRM is thought to be the most effective method for putting HR plans, policies, and decision- making into practice.

Voermans (2006) According to his research paper, web-based HRM can be easily implemented in an organization if employers have a good attitude toward their work. Implementing web- based HRM is a slow process if an organization's reputation is bad. Swaroop (2012) His study primarily focuses on the speed, cost-effectiveness, and ease of use of web-based HRM. It also emphasizes how the new system relieves the administrators of some of their workload while delivering excellent and effective services to everyone connected to the company.

Ruel (2006) He carried out research to determine whether the use of web-based HRM would improve the efficacy of HRM on both a technical and strategic level. This study has precisely identified the elements of web-based HRM that are most important to consider when assessing the efficacy of HRM.

Ye (2015) The primary goal of this study was to increase knowledge about web-based HRM and aid in a more thorough and methodical understanding of the subject. According to the study, this is the most effective method for achieving an organization's objectives in order to maximize potential and satisfy current demands.

Fındıklı (2015) According to the report, cost effectiveness, ease of time management, and simple access to individual information are some of the main reasons why any business choose to use web-based HRM. Although there were several advantages to employing web-based HRM, one of the main disadvantages was that web-based training.

Research Questions

This study aims to answer the following research questions-
- Which HR functions have AI embedded in them?
- How does AI in HR help businesses, workers, and HR specialists?
- To what degree has AI been applied in corporate settings?
- How do web-based HRM features improve the effectiveness of an organization?

Research Methodology

Since no primary research was done, the study mostly relied on secondary data. To find papers from several databases including Google Scholar, ProQuest, and grey literature, a great deal of study was done. Ultimately, about 20 unpublished and 6 published pieces were gathered from various sources. With the aid of standardized questionnaires, the study also used an interviewing technique with an emphasis on corporate HR personnel. To learn more about AI implementation, the study collected primary data from about 117 professionals. There are no experimental facts in this conceptual article.

Findings & Interpretation

With the aid of AI, which has gradually permeated too many HR activities, HR has been undergoing a significant transformation. Previously performed solely by humans, many tasks are now reshaped with the aid of a virtual assistant.AI has been applied to a wide range of HR tasks, including learning and development, performance evaluation, and talent acquisition.

AI in Acquisition of Talent

One of the repetitive tasks in HR is talent acquisition. The hiring process, which involves luring talent, reviewing resumes, monitoring and evaluating, setting up and carrying out initial interviews, updating candidates on their progress, and onboarding, takes up the majority of recruiters' and HR professionals' productive time. With the use of AI, these tedious tasks have significantly decreased. Wislow (2017) claims that about 75% of the labour associated with the hiring process has been reduced by talent acquisition software.

Recruiting takes a lengthy time, including searching for applicants and publishing a job ad on pertinent websites. However, LinkedIn, Glassdoor, indeed, Naukri, and other websites that use artificial intelligence (AI) employ artificially intelligent algorithms to suggest jobs to applicants based on their applications,

search histories, connections, and keywords. Preliminary interviews and resume screening are important but time-consuming processes, particularly when hiring is done in large quantities. Software businesses can perform audio or video interviews more quickly and efficiently with the aid of artificial intelligence (AI) (Hooda, 2018). According to a Mondal (n.d.) study, businesses that use AI software for hiring and related tasks might enhance recruiter efficiency by three times and save costs per hire by 71% (quoted by Min, 2017).

Most businesses struggle with engaging and re-engaging prospects because it takes a lot of time. Companies typically don't receive any feedback or responses about a candidate's status after they apply for a job or after the interview is over. According to Biswas (2018), young people today anticipate hearing back from the firm within ten minutes after submitting a job application. Therefore, it is crucial to reply to them after applying for a position or following the interview; otherwise, one risks losing them to more responsive competitors. AI-integrated software, such as Chatbot, application tracking systems (ATS), & customer relation management (CRM), not only gives candidates immediate responses to all of their inquiries, but also gives them status updates.

The final step in the employment process is accepting the offer letter and going through the onboarding procedure, which is crucial for the company. Candidates are dropping out at significant rates these days after accepting an offer letter. There is a grey area, or the time between a candidate's resignation from their current employer and their joining a new one. Therefore, it is necessary to send follow-ups at regular intervals to keep them interested and lower dropout rates, which is accomplished with AI's assistance. Similar to this, every organization offers new hires an orientation session that educates them about the company's rules, policies, culture, and legislation. However, over 90% of the employees miss or forget some information during these orientations (Miller, 2016). Thus, Zhou (n.d.) asserts that HR professionals can construct new employee profiles with the use of intelligent bots. Workers can also interact with these chatbots that can be set up to offer real-time clarification on insurance, benefits, and business requirements. Min (2017).

AI in Learning & Development

AI is quickly taking the place of education and training. Regular participation in L&D programs is essential for all staff members to boost productivity and promote personal growth. It is a continuous process that relates to work and company policies for new as well as previous personnel. AI has the potential to personalize L&D and give users a more distinctive experience. Consequently, learning can take place while it occurs most suitable for the individual. HR must ensure that the materials for learning include an efficient grading system and clever, relevant information in order to maintain their attention and raise their level of participation (Power, 2018). With AI in L&D, HR's only focus is on developing top-notch L&D programs that are available through an e-learning platform and customized to each individual's preferences utilizing new skills, current patterns, and additional considerations (Wislow, 2017). As a result, HR professionals can avoid spending time planning and executing employee education initiatives in person, that can be sometimes tiresome and time-consuming. Knowing how staff members felt regarding every class they attended is essential, even when education and growth is provided online with fewer human beings present. In order to improve future training and development programs and make sure that employees feel valued and that their ideas are taken into consideration, it is imperative that feedback be gathered.

Employee Engagement

AI is rapidly replacing training and education. All employees must regularly participate in L&D programs in order to increase productivity and foster personal development. For both new hires and current employees, it is an ongoing process that pertains to work and corporate policies. AI could help users have a more unique experience and personalize L&D. As a result, learning can happen whenever it is most convenient for the individual. To keep their interest and increase their level of participation, HR must make sure that the learning resources have an effective grading system and astute, pertinent content (Power, 2018). When AI is used in L&D, HR's sole focus is on creating excellent training and development initiatives that are accessible via an online learning system and tailored to each person's

preferences using new skills, contemporary trends, and other factors (Wislow, 2017). As a result, HR managers can skip the potentially exhausting and time-consuming process of designing and carrying out staff education campaigns in person. Even when training and development are offered online having fewer individuals present, it is crucial to know how employees felt about each class they attended. Feedback must be obtained in order to enhance future programs for education and growth, ensure that staff members feel appreciated, and ensure that their suggestions are taken into account.

Web Based HRM

One of the most recent developments in the business sector that is starting to gain traction is web-based HRM. Our research leads us to the conclusion that integrating technology into HRM has improved an organization's dependability and security while also making it much simpler to record and store data on human resources. By bridging the gap between those who need work and those who want to hire, web-based HRM has made the goal of many small businesses to expand internationally a reality. Many Indian businesses now employ web-based HRM software, demonstrating that this is the most efficient and successful approach in our rapidly expanding economy. Businesses in this world must either adapt to the needs of the people around them or face extinction. The only recommendation for all HR managers is that they should be adaptable and keep a close watch on the newest technology that are being introduced to the market on a daily basis. Making employees feel appreciated and that their opinions are taken into consideration will also help them remain in the race that every company is a reluctant participant in.

Implications of the Study

To find out how much AI has been incorporated into HR operations, the study employed an interviewing technique in which HR specialists were questioned. Based on the results, it was concluded that since hiring and selection take the most time, the majority of businesses have heavily integrated AI into this process. Additionally, they have agreed that the use of AI will enable online recruitment, screening, interview scheduling, and other stages of the process. As a result, HR's degree of efficiency has significantly enhanced. The onboarding process, which is another drawn-out procedure involving a lot of paperwork and time, is the second area where AI is used. These tasks are automated with the use of AI, and they are completed more quickly with the aid of internet platforms. The majority of businesses are still in the testing phase with regard to other functions.

There are a lot of publications about AI and how it may be used in HR, but not many of them are research-based. As a result, little scholarly research has been done to fully understand the advantages of integrating AI in HR. This qualitative research-based work advances the theory- building of HR and AI. The study's findings demonstrated how AI has been applied to a variety of HR functions and how it has enhanced the function's organization and efficiency. The poll also highlights the many benefits AI integration provides to employees, human resources departments, and businesses. The findings demonstrate the necessity for AI to be encompassed into HR procedures by all companies in the competition that no company wants to enter, as well as for ensuring that workers feel valued and that their ideas are heard.

Conclusions

Many HR tasks are definitely being taken over by AI, but this is not an indication that HR jobs are being displaced by AI, so this is false. Posting employment opportunities, sourcing, screening, scheduling meetings and interviews, preparing timesheets, documenting and verifying user accounts, and other expenditures are just a few of the significant and routine administrative duties that HR professionals manage. Naturally, if AI can fully automate this, HR experts will benefit greatly. This is because they will have more time to concentrate on problem-solving, creativity, connection-making, emotional intelligence, and strategic thinking. Although the future of AI in HR is bright, many challenges must be addressed before a company can reap the full benefits of its incorporation (Bersin, 2017). Only when high-quality data is collected and provided can AI perform similarly to a person; otherwise, the outcomes could be erroneous. Because of this, collecting all pertinent data during integration is a time- consuming process, but it is just the first challenge. Second, businesses need to take the necessary precautions to ensure that the regulations and documents they offer are safe, confidential, and not misused. Lastly, AI can greatly lessen human bias and error, even if we cannot promise that it will be 100% successful. Many companies

are attempting to integrate AI into HR despite these challenges since the advantages outweigh the disadvantages. A relatively recent development, web-based HRM can be used in a variety of ways. In its most basic form, it might be a simple web-based system for retrieving human resources (HR) data. A completely combined, across the organization electronic system containing a web-based HRM-related data, knowledge, services, databases in addition tools, applications, and transactions is always available to managers, HRM professionals, and employees with high- end web-based HRM. Web-based HRM makes it easy to convey the corporation's vision and values.

The major purpose of web-based HRM is to gather employee suggestions. The primary purpose of a web-based HRM system is to handle grievances. The highest level of transparency is necessary for the organization to properly implement web-based HRM. The primary drawback of integrating web-based HRM in a company is the high implementation costs. Additionally, the adoption of web-based HRM has decreased human interactions in comparison to traditional HRM techniques. Additionally, it has reduced the use of paper by nearly half by automating the majority of transactions. Additionally, web-based HRM makes it simpler to backup all data, preventing it from being readily altered or lost.

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